

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FWA4-12	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2004/010203	International filing date (day/month/year) 16.07.2004	Priority date (day/month/year) 26.08.2003
International Patent Classification (IPC) or national classification and IPC H04N13/04		
Applicant SHARP KABUSHIKI KAISHA		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>9</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>2</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>	
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input checked="" type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>	

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-13 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 2, 3, 7, 10 _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1, 6, 8, 9, 13, 14 _____ received by this Authority on 25.03.2005
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1-8 _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☒ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☒ the claims, nos. 4, 5, 11, 12 _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. IV

Lack of unity of invention

1. ☒ In response to the invitation to restrict or pay additional fees the applicant has:
- ☐ restricted the claims.
 - ☒ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ neither restricted the claims nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:
- ☐ complied with.
 - ☒ not complied with for the following reasons:

The feature that is common to the inventions set forth in claims 1 to 3, 6 to 10, 13 and 14 (claims 4, 5, 11 and 12 were deleted by the amendments) pertains to the reproduction of a three-dimensional video image based on the control information for controlling the display of three-dimensional video image data, wherein the magnitude of the parallax in the display screen is adjusted based on the control information when displaying the aforementioned three-dimensional video data.

[Refer to the Supplemental Box]

4. Consequently, this report has been established in respect of the following parts of the international application:
- ☒ all parts.
 - ☐ the parts relating to claims Nos. _____

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	3, 10	YES
	Claims	1, 2, 6, 7, 8, 9, 13, 14	NO
Inventive step (IS)	Claims		YES
	Claims	1-3, 6-10, 13, 14	NO
Industrial applicability (IA)	Claims	1-3, 6-10, 13, 14	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
Document 1: JP 10-150608 A (Sanyo Electric Co., Ltd.), 02 June 1998			
Document 2: JP 09-121370 A (Matsushita Electric Industrial Co., Ltd.), 06 May 1997			
Document 3: JP 2000-224612 A (Nippon Telegraph And Telephone Corp.), 11 August 2000			
Document 4: JP 08-317429 A (Matsushita Electric Industrial Co., Ltd.), 29 November 1996			
Document 5: JP 08-009421 A (Sanyo Electric Co., Ltd.), 12 January 1996 (Family: none)			
<p>The inventions set forth in claims 1, 2, 8 and 9 are disclosed in document 1 (paragraphs 0066 to 0067 and fig. 1) cited in the international search report; therefore, the inventions in question lack novelty and do not involve an inventive step.</p> <p>The inventions set forth in claims 1 and 8 do not involve an inventive step in the light of document 1 and document 2 cited in the international search report. Document 2 discloses a technical feature wherein the image resolution and the display size are taken into consideration when calculating the magnitude of the parallax (paragraphs 0038 to 0040 and fig. 1), and thus</p>			

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

it would have been easy for a person skilled in the art to conceive of employing the aforementioned technical feature in the terminal that is disclosed in document 1.

Meanwhile, on page 4 of the written response the applicant asserts that "(1) the screen size in the invention disclosed in document 1 and the 'display size' in the invention set forth in the present application refer to different characteristics; (2) in the invention disclosed in document 1, a decrease in the screen size will cause a decrease in the parallax, whereas an increase the screen size will cause an increase in the parallax, which can give rise to problematic situations in which the parallax exceeds the binocular fusion limit; and (3) the present invention has been configured so as to adjust the 'magnitude of the parallax' so that the parallax is set to a reference parallax value, as is set forth in the description of the present application (paragraph 0050)."

However, it is thought that an increase in the screen size of the invention disclosed in document 1 will cause a corresponding increase in the display size thereof, and thus there is not considered to be any significant difference between the screen size and the display size. Meanwhile, with regards to item (2), the claims of the present application do not include any disclosures in relation to cases in which there is a decrease in the screen size. As a result, the assertion that a decrease in the screen size will cause a decrease in the parallax is not based upon the disclosures in the claims, and thus said assertion is not applicable. Furthermore, the invention disclosed in document 1 also includes a configuration whereby the magnitude of the

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parallax is decreased as the screen size increases (paragraph 0067), and thus can be considered to be configured in a manner such that the parallax will not exceed the binocular fusion limit. Likewise, with regards to item (3), the feature wherein the "magnitude of the parallax" is adjusted so that the parallax is set to a reference parallax value is not set forth in the claims of the present application, and assertions that are not based upon the disclosures in the claims are not applicable.

As a result, the aforementioned assertions in the written response that was submitted by the applicant are not applicable.

The inventions set forth in claims 3 and 10 do not involve an inventive step in the light of document 1 and document 3 cited in the international search report. Document 3 discloses the technical feature of magnifying or reducing the three-dimensional video image so that the three-dimensional video image is displayed at the same size regardless of the size of the three-dimensional display device, and thus it would have been easy for a person skilled in the art to conceive of employing the aforementioned technical feature in the terminal that is disclosed in document 1.

The inventions set forth in claims 6, 7, 13 and 14 are disclosed in document 4 (paragraph 0038 and fig. 2) cited in the international search report; therefore, the inventions in question lack novelty and do not involve an inventive step.

Meanwhile, on page 5 of the written response the applicant asserts that "(1) the present invention differs from the invention disclosed in document 4 in that it is

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not necessary to extract the parallax value from within the image because the present invention employs the parallax value that is defined within the control information; and (2) problems occur when the invention disclosed in document 4 is used to reproduce dynamic images, whereas problems such as those indicated above do not occur when the present invention is used for such a purpose because the present invention adjusts the magnitude of the parallax by establishing limits for the reduction ratio or the magnification ratio and then changing the display size" (with consideration of the disclosures in the claims, it is thought that the assertion in question should indicate the "image size," not the "display size").

However, the feature wherein the parallax value is defined in the control information is well known, as disclosed in newly cited document 5 (paragraph 0015) for example. Meanwhile, with regards to item (2), the claims do not set forth the feature wherein the image is a moving image, and a person skilled in the art could employ the invention that is disclosed in document 4 in order to reproduce static images, as appropriate; therefore, the aforementioned assertions by the applicant are not applicable.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box IV.3

However, as a result of the search it became apparent that the aforementioned common feature is not novel in as much as said feature is disclosed in the document JP 08-009421 A ((Sanyo Electric Co., Ltd.) 12 January 1996, paragraphs 0015 to 0030). As a result, the aforementioned common feature does not define a contribution over the prior art, and thus said feature is not a special technical feature in the meaning of the second sentence of PCT Rule 13.2. Such being the case, there is no feature that is common to all of the inventions that are set forth in claims 1 to 3, 6 to 10, 13 and 14; consequently, it is clear that the inventions set forth in claims 1 to 3, 6 to 10, 13 and 14 do not conform to the requirement of unity of invention.

Among the inventions that are set forth in claims 1 to 3, 6 to 10, 13 and 14:

I. the inventions set forth in claims 1 to 3 and 8 to 10 pertain to a device for reproducing a three-dimensional video image or a method for reproducing a three-dimensional video image wherein image processing is carried out in cases when the magnitude of the parallax in the display screen after displaying the three-dimensional video image data exceeds the magnitude of the parallax in the display when the three-dimensional video image data is displayed upon a reference display device; and

II. the inventions set forth in claims 6, 7, 13 and 14 pertain to a device for reproducing a three-dimensional

Supplemental Box

video image or a method for reproducing a three-dimensional video image wherein the magnification ratio or the reduction ratio is limited in cases when the parallax in the display screen after displaying the three-dimensional video image data is determined to have a parallax value such that stereoscopic viewing is not possible.

In addition, these two groups of inventions cannot be considered to be a group of inventions that are so linked as to form a single general inventive concept.

Therefore, the scope of the present application that is considered to conform to the requirement of unity of invention by the International Preliminary Examining Authority is as follows:

claims 1 to 3 and 8 to 10.